

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination LYONS ET AL.	
		Examiner Michael M. McGaw	Art Unit 1648	Page 1 of 6

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,990,085	11-1999	Ireland et al.	514/12
*	B	US-6,231,864	05-2001	Birkett, Ashley J.	424/189.1
*	C	US-2004/0054139	03-2004	Page et al.	530/350
*	D	US-5,143,726	09-1992	Thornton et al.	424/189.1
*	E	US-2003/0202982	10-2003	Birkett, Ashley J.	424/189.1
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
*	N	WO 200198333 A2	12-2001	World Intellect	BORISOVA et al.	A61K 39/29
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages
	U	Conway, J.F. et al. Hepatitis B virus capsid: Localization of the putative immunodominant loop (residues 78 to 83) on the capsid surface, and implications for the distinction between c and e-antigens (1998) J. Mol. Biol. 279: 1111-1121.
	V	Jegerlehner, A. et al. A molecular assembly system that renders antigens of choice highly repetitive for induction of protective B cell responses (2002) Vaccine 20 : 3104-3112.
	W	Koschel, M. et al., Extensive mutagenesis of the hepatitis B virus core gene and mapping of mutation that allow capsid formation (1999) Journal of Virology, 73(3): 2153-2160.
	X	Kratz, P. A. et al. Native display of complete foreign protein domains on the surface of hepatitis B virus capsids (1999) Proc. Natl. Acad. Sci., Vol. 96: 1915-1920.

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination LYONS ET AL.	
		Examiner Michael M. McGaw	Art Unit 1648	Page 2 of 6

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Nassal, M. et al. Topological analysis of the hepatitis B virus core particle by cysteine-cysteine cross-linking (1992) Journal of Molecular Biology, 225(4):1013-1025.
	V	Nassal, M. et al. An intramolecular disulfide bridge between cys-7 and cys61 determines the structure of the secretory core gene product (e antigen) of hepatitis B virus (1993) Journal of Virology, 67(7):4307-4315.
	W	Pumpens, P. et al. Hepatitis B virus core particles as epitope carriers (1995) Intervirology 38 :63-74.
	X	Pumpens, P. et al. Hepatitis core particles as a universal display model : a structure-function basis for development (1999) FEBS Letters, vol. 442:1-6.

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination LYONS ET AL.	
		Examiner Michael M. McGaw	Art Unit 1648	Page 3 of 6

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages
	U	Pumpens, P. et al. HBV core particle as a carrier for B cell/T cell epitopes (2001) Intervirology, 44: 98-114. ↗
	V	Schodel, F. et al. Structure of hepatitis B virus core and e-antigen (1992) The Journal of Biological Chemistry, 268(2):1332-1337. ↗
	W	Seifer, M. et al. Stability governs the apparent expression of "particulate" hepatitis B e antigen by mutant hepatitis B virus core particles (1993) Virology 196:70-78. ↗
	X	Watts, N. R. et al. The mophogenic linker peptide of HBV capsid protein forms a mobile array of the interior surface (2002) EMBO Journal, Vol. 21, No. 5, pp. 876-884. ↗

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination LYONS ET AL.	
		Examiner Michael M. McGaw	Art Unit 1648	Page 4 of 6

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages
	U	Ulrich, R. et al. Core particles of hepatitis B virus as carrier for foreign epitopes (1998) Advances in Virus Research, vol. 50:141-182. ✓
	V	Zheng, J. et al. The structure of hepadnaviral core antigens (1992) The Journal of Biological Chemistry, 267(13):9422-9429. ✓
	W	Zhou, S. et al. Cys residues of the hepatitis B virus capsid protein are not essential for the assembly of viral core particles but can influence their stability (1992) Journal of Virology, 66(9): 5393-5398. ✓
	X	Zhou, S. et al. Hepatitis B virus capsid particles are assembled from core protein dimer precursors (1992) Proc. Natl. Acad. Sci. 89:10046-10050. ✓

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination LYONS ET AL.	
		Examiner Michael M. McGaw	Art Unit 1648	Page 5 of 6

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Zhou, S. et al. Charaterization of hepatitis B virus capsid particle assembly in Xenopus oocytes (1992) Journal of Virology, 66 : 3086-3092.
	V	Zlotnick, et al., Dimorphism of hepatitis B virus capsids in strongly influenced by the C-terminus of the capsid protein (1996) Biochemistry, 35:7412-7421.
	W	Zlotnick, A. et al. Localization of the C terminus of the assembly domain of hepatitis B virus capsid protein: Implications for morphogenesis and organization of encapsidated RNA (1997) Proc. Natl. Acad. Sci. 94: 9556-9561.
	X	Nierynck et al. A universal influenza A vaccine based on the extracellular domain of the M2 protein (1998) Nature Medicine, 5(10):1157-1163

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited		Application/Control No.	Applicant(s)/Patent Under Reexamination LYONS ET AL.	
		Examiner Michael M. McGaw	Art Unit 1648	Page 6 of 6

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages
	U	Rudinger, J. Characteristics of the amino acids as components of a peptide hormone sequence. In: Peptide Hormones J.A. Parsons Ed. (June 1976) University Park Press, pages 1-6 at page 6.
	V	Gallina, A. et al A recombinant hepatitis B core antigen polypeptide with the protamine-like domain deleted self-assembles into capsid particles but fails to bind nucleic acids (1989) Journal of Virology, 63(11): 4645-4652.
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.